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## CLAIMS

## I claim:

- A disk enclosure comprising:
- a first group of one or more power sources implementing a first power domain;
  - a first plurality of elements powered by the first group of power sources;
  - a second group of one or more power sources implementing a second power domain; and
  - a second plurality of elements powered by the second group of power sources.
  - The disk enclosure of claim 1, wherein the first plurality of elements includes at least one of a temperature sensor, a memory, and a backplane controller.
- 15 3. The disk enclosure of claim 2, wherein the backplane controller is coupled to a port bypass circuit, the port bypass circuit operable to bypass an element in the first plurality of elements.
  - The disk enclosure of claim 3, wherein the bypassed element is a disk drive.
- 20 5. The disk enclosure of claim 1, further comprising:
  - a first voltage circuit coupled to the first group of power sources and the second group of power sources, the first voltage circuit operable to generate a first voltage; and

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a second voltage circuit coupled to the first group of power sources and the second group of power sources, the second voltage circuit operable to generate a second voltage;

- The disk enclosure of claim 5, wherein the first voltage circuit and the
  second voltage circuit are similarly implemented.
  - 7. The disk enclosure of claim 5, wherein the first voltage circuit comprises:

a first diode connected to the first group of power sources;

a second diode connected to the second group of power sources;

a first fuse coupled between the first diode and an output terminal of the first voltage circuit; and

a second fuse coupled between the second diode and the output terminal of the first voltage circuit.

- The disk enclosure of claim 1, wherein the first group of one or more power sources comprises at least one power supply.
- 15 9. The disk enclosure of claim 8, wherein the first group of one or more power sources further comprises at least one backup batter.
  - 10. A disk enclosure comprising:

a first plurality of elements;

a second plurality of elements;

a first group of one or more power sources;

a second group of one or more power supplies;

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a first voltage circuit operable to generate a first shared voltage from the first and the second groups of one or more power supplies, the first shared voltage supplied to the first plurality of elements; and

- a second voltage circuit operable to generate a second shared voltage from the first and the second groups of one or more power sources, the shared second voltage supplied to the second plurality of elements.
- 11. The disk enclosure of claim 10, wherein the first voltage circuit and the second voltage circuit are similarly implemented.
- 12. The disk enclosure of claim 10, wherein the first voltage circuit comprises:
  - a first diode connected to the first group of power sources;
  - a second diode connected to the second group of power sources;
  - a first fuse coupled between the first diode and an output terminal of the first voltage circuit; and
  - a second fuse coupled between the second diode and the output terminal of the first voltage circuit.
- 13. The disk enclosure of claim 10, wherein the first and the second pluralities of elements each includes at least one of a transceiver, a repeater, a memory, and an enclosure controller
- The disk enclosure of claim 10, wherein the first and the second pluralities
  of elements each includes at least one of a backplane controller, a port bypass circuit, a temperature sensor, and a memory.